



August 11, 2005

Ms. Katherine Benham  
USDA-AMS-TMD-NOP  
1400 Independence Avenue, SW.  
Room 4008-So., Ag Stop 0268  
Washington, DC 20250-0200

Re: Recommendation for Clarification of the Definition of Synthetic

Dear Ms. Benham,

Thank you for your request for comments to the National Organic Standards Board for consideration at their upcoming meeting. **Country Choice Organic** appreciates the opportunity to comment on the Joint Materials and Handling Committee Recommendation for Clarification of the Definition of Synthetic voted on June 23, 2005.

**Country Choice Organic** joins with Florida Crystals Food Corp. to offer the following comments as guidance to the Joint Committee in finalizing their recommendation.

We understand that the recommendation attempts to clarify the broad definition of Synthetic as it applies to all substances on the National List allowed for crop production, livestock production and handling (Processing) of organic products. Furthermore we understand that the Committee's recommendation is specific to the definitions of Extraction, Formulation or Manufacturing, Processing, Chemical reaction, Substance, Substances created by naturally occurring biological process and Non-synthetic.

We support the position of Florida Crystals by adding the following general comments to your recommendation under the following definitions:

Extraction

We agree with the recommendation that "as long as a chemical reaction does not occur, the substances that are removed from a naturally occurring plant, animal or mineral source are non-synthetic, provided any synthetic substances used in the extraction process do not remain in the final product above insignificant levels and do not have any technical or functional effect."

We suggest that more detail be added to clarify the definition of “non-synthetic” and refer to the definition submitted by the Organic Trade Association’s Technical Task Force:

**Non-synthetic: A substance that is naturally occurring in plants, animals, minerals, water or air or a substance that has been created by naturally occurring biological processes or food processing techniques/action defined in the Act (“Processing”). Non-synthetic substances have not undergone changes to covalent bonds during manufacture except in the case of naturally occurring biological processes or accepted food process techniques.**

#### Formulation or Manufacturing

We agree with the Committee that “once a substance is extracted, if it then undergoes a chemical reaction as it is processed, formulated or manufactured to produce agricultural or handling inputs, it then would be considered a **synthetic** and would have to be petitioned for inclusion on the National List.”

We support Florida Crystal’s comments that an exception to the definition of **synthetic** be created if:

- the formulated or manufactured input is produced from substances already classified as non-synthetics and
- the formulated or manufactured input has not resulted in changes to covalent bonds and
- the formulated or manufactured input reduces the quantity of the original substance required for optimum use in organic handling by removing extraneous components of the original substance and
- the process of manufacturing is limited to those methods of Processing specified by definition in the Act and in the NOP regulations.

#### Processing

We agree with the definition cited in OFPA and the NOP rule allowing the following methods for organic handling operations:

Mechanical or biological methods including but not limited to “cooking, baking, curing, heating, drying, mixing, grinding, churning, separating, extracting, distilling, slaughtering, cutting, fermenting, eviscerating, preserving, dehydration, freezing, chilling, or otherwise manufacturing and includes the packaging, canning, jarring, or otherwise enclosing food in a container” and recommend that the definition be expanded to include crystallization, evaporation and combustion. Furthermore we suggest that the definition of heating be clarified as applicable to food processing.

We support Florida Crystals’ recommendation that the same chemical changes allowed using the above methods in the production of food, be allowed in the production of non-synthetic ingredients and processing aids necessary to the production of that food. For example, the rising of bread involves a chemical change as a result of fermentation using yeast that liberates carbon dioxide and that change in bread is allowed in organic handling.

## Chemical Reaction

We support Florida Crystals and the OTA Technical Task Force recommendation and interpretation of chemical reaction as demonstrated by the Decision Tree: Non-synthetic or Synthetic and the definitions that explain it, submitted by the OTA Technical Task Force that includes the consideration of changes to covalent bonds and the removal of processing aids in the determination.

## Non-Synthetic

We support Florida Crystals and the OTA Technical Task force definition of Non-synthetic as noted above under Extraction:

**Non-synthetic: A substance that is naturally occurring in plants, animals, minerals, water or air or a substance that has been created by naturally occurring biological processes or food processing techniques/action defined in the Act ("Processing"). Non-synthetic substances have not undergone changes to covalent bonds during manufacture except in the case of naturally occurring biological processes or accepted food process techniques.**

## Conclusion

We request that the Conclusion be restated as follows:

The proposed NOSB clarification of definitions regarding **chemical change and chemical reaction** is useful for determining what substances are synthetic **and non-synthetic**, and should be the basis for determination of synthetic **or non-synthetic** status. Further attention to the definitions **included and suggested** will also facilitate the determination. When reviewing substances, the NOSB must review the steps of production and determine if a chemical change occurred in manufacture of the substance **and based on such chemical change determine the synthetic or non-synthetic status of the substance.**

We recognize the diligence and the effort of the National Organic Standards Board to grapple with these complex issues and commend the National Organic Program for their help is communicating our comments to the Board. The organic industry has put its trust in the NOSB to make recommendations to USDA in the highest interest of the organic community that includes producers, handlers and consumers and we have complete confidence that these comments will be given every consideration.

Sincerely,

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**Director of Research and Development**  
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